Chapter 960 Median Crossovers

960.01 General

Median crossovers are provided at selected locations on divided highways for crossing by maintenance, traffic service, emergency, and law enforcement vehicles. Crossovers may be provided:

- Where they appear on the master plan of crossovers for the corridor
- Where analysis demonstrates that access through interchanges or intersections is not practical
- As part of a law-enforcement plan

This chapter provides guidance for locating and designing median openings not located at an intersection and for which use is restricted to maintenance, traffic service, emergency, and law enforcement vehicles. For median openings to provide unrestricted U-turns to allow public access to both sides of the roadway, see Chapter 910, Intersections At Grade.

960.02 Analysis

A list of existing and preapproved median crossovers is available from the HQ Transportation Data Office of Strategic Planning and Programming.

Two general categories of vehicles are recognized as legitimate users of median crossovers. One category is law enforcement vehicles and the other is governmental services vehicles (emergency, traffic service, and maintenance vehicles).

In an urban area with a high occupancy vehicle lane adjacent to the median, crossovers may be used in conjunction with law enforcement observation points, and downstream enforcement (widened shoulder) areas, as part of the law enforcement plan.

In other urban areas and in rural areas, crossovers may be necessary to a law enforcement plan.

A crossover that is primarily for governmental service vehicles may be justified on the basis that access through interchanges or intersections is not practical. In urban areas where there are 3 or more miles between access points, providing an unobtrusive crossover may improve emergency service or improve efficiency for traffic service and maintenance forces.

Locate rural crossovers 3 or more miles from an interchange.

Where crossovers are justified and used for winter maintenance operations such as snow and ice removal, the interchange or intersection spacing rule does not apply and the distance from the ramp merge or diverge points may be decreased to a 500-ft minimum with 1,000 ft the desirable minimum.

Minimize visibility of the crossover to the traveling public.

960.03 Design

Consider the following design criteria for all median crossovers. However, taking into consideration the intended vehicle usage, some of the criteria may not apply to crossovers intended primarily for enforcement.

- Adequate median width at the crossover location is required to allow the design vehicle to complete a U-turn maneuver without encroaching within 8 ft of the traffic lanes, and without backing. The common design vehicles for this determination are a passenger car and a single unit truck depending upon the intended use of the crossover. Generally the minimum recommended median width is 40 ft.
- Use grades and radii that are suitable for all authorized user vehicles.

- Provide adequate inside shoulders to allow vehicle deceleration and acceleration to occur off the traffic lanes. Ten-foot inside shoulders are adequate for most cases. Provide full 10-foot shoulders for a distance of 450 ft upstream of the crossover area to accommodate deceleration, and extend downstream of the crossover area for a distance of 600 ft to allow acceleration prior to entering the traffic lane.
- Provide adequate stopping sight distance for vehicles approaching the crossover area. Because of the unexpected maneuvers associated with these inside access points and higher operating speeds commonly experienced in the inside traffic lanes, use conservative values for stopping sight distance. (See the Roadside Classification Plan.)
- Use side slopes of the crossing no steeper than 10H:1V. Grade for a relatively flat and gently contoured appearance that is inconspicuous to the public.
- Do not use curbs or pavement markings.
- Flexible guide posts may be provided for night reference. (See the Standard Plans.)
- Consider the terrain and locate the crossover to minimize visibility to the public.
- Vegetation may be used to minimize visibility. Low vegetation, with a 3-ft year-round maximum height is recommended for this purpose. (See Chapter 1300).
- In locations where vegetation cannot be used to minimize visibility and there is a high incidence of unauthorized use, appropriate signing (No U-Turns) may be used to discourage unauthorized use.

A stabilized all-weather surface is required. Urban crossovers for a high occupancy vehicle enforcement plan are usually paved. Other urban crossovers may be paved if unauthorized use is minimized. Rural crossovers are not usually paved in order to be inconspicuous.

960.04 Approval

All existing and planned crossover locations will be designated on a corridor or regional Master Plan for Median Crossovers. A committee consisting of the Assistant Regional Administrator for Operations or Project Development, the Washington State Patrol Assistant District Commander, the Headquarters (HQ) Access Engineer and the FHWA Safety and Operations Engineer or equivalents will be responsible for establishing and updating this plan yearly with proposed new crossings and removal of crossings that are no longer necessary.

Regional Administrators are responsible for the design and construction of median crossovers. Prior to construction of the opening, submit the documentation of crossover and the design data (together with a right of way print showing the opening in red) to the State Design Engineer for right of way or limited access plan approval. Construction should not proceed until approval is received.

After notification of approval, the Headquarters (HQ) Right of Way Plans Section sends the region a revised reproducible right of way or limited access plan which includes the approved crossover location.

960.05 Documentation

A list of documents that are to be preserved [in the Design Documentation Package (DDP) or the Project File (PF)] is on the following website: http://www.wsdot.wa.gov/eesc/design/projectdev/